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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,595	11/21/2000	Dan Kikinis	P1541D1	5336

24739 7590 07/16/2002

CENTRAL COAST PATENT AGENCY  
PO BOX 187  
AROMAS, CA 95004

EXAMINER
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PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 07/16/2002

14

Please find below and/or attached an Office communication concerning this application or proceeding.

*Handwritten signature*

HG

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/718,595	KIKINIS, DAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	B. PRIETO	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This communication is in response to communication filed 06/26/02, interview summary (paper# 13), claims 16-37 remain pending.
2. Previous office action is hereby vacated to correct minor noted informalities as mentioned on the above mentioned interview summary.

***Claim rejection 35 U.S.C §103***

3. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office actions.
4. Claims 16-17, 19, 21-23, 25-26, 28, 30-32, 34-35 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et. al. (Lawler).

Regarding claim 16, Lawler teaches an interactive station controller (18) (set top box) (col 5/lines 38-43), comprising;

broadband receiver for receiving multimedia information (col 3/lines 30-67, analog/digital video and digital application data, receiver of analog video signals i.e. broadband signals, col 4/lines 24-29) over a network from multiple sources (satellite downlink, head end system (12), col 5/lines 30-37, or servers (26, 30) col 4/lines 1-10, providing program guide and digital application data);

receiving said multimedia information including displayable data stream (col 5/lines 49-56) and further including future programming (col 4/lines 36-51, future program schedule information, col 9/lines 52-62 from one of said sources) in real-time (col 9/lines 63-col 10/line 2 displayed in real time) to form a display from the displayable data stream (col 9/lines 63-col 10/line 8, delivered from said sources, col 6/lines 7-28, generating multimedia data e.g. video for display, col 5/lines 49-56),

displayable indicia including command(s) (Figs. 5-6, and 10, elements 128, 130, and 140) associated with displayable indicia, said command(s) associated with said displayable indicia (col 7/lines 20-26, commands such as links, col 4/lines 36-51, commands such as buttons 128, 130 or 140, col 10/lines 42-col 11/line 6);

tuner/demultiplexer circuitry (50, 52, and 54) for separating (selecting or tuning) said multimedia information received in real-time including analog-digital video signal (displayable indicia) so as to form display image (Fig. 3 and 6, e.g. program guide) on display screen (46) (col 5/lines 49-67, program guide displayed with information from headend);

remote control (22) (user-operable apparatus) (col 3/lines 34-36, col 5/lines 38-43) to select the displayable indicia (col 10/lines 16-41);

in response to the selection of displayable indicia associated a command (action) (col 10/lines 42-59), storing said command and executing instructions associated with said command at a future point in time (e.g. set record command via displayable indicia (record button 130), select displayable indicia associated with an action, col 10/lines 53-58 causing portion of the multimedia stream (e.g. selected program) to be recorded in a future point in time, col 13/lines 8-26, order command col 10/lines 60-65 via order displayable indicia (order button 138), set reminder command via the selection of displayable indicia (reminder button 140) associated with respective command, col 10/line 65-col 11/line 32, col 11/line 45-col 12/line 12);

however Lawler's receiver for receiving as claimed is not denoted "broadband receiver", and components for separating displayable data stream as claimed are not denoted "tuner/demultiplexer circuitry";

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Lawler to perform the same functions as claimed, motivation would be implement an displayable interactive program guide received form multiple sources, configured to enable a user interact with said guide to select a future program from the program guide and select function associated with actions, executing said actions a future point in time.

Regarding claim 17, execution of command (e.g. order a program via button 138) comprises switching the display screen to a channel associated with future programming at a predetermined future point in time (Lawler: col 11/lines 36-44).

Regarding claim 19, broadband receiver via a satellite data link a corresponding data stream (Lawler: col 3/lines 54-67).

Regarding claim 21, as discussed on claim 16, and multimedia further including television programming (Lawler: col 3/lines 30-33, 61-67).

Regarding claim 22, said set top box (18) includes a memory system (60) for storing said program schedule information discussed above (Lawler: col 9/lines 63-col 10/line 3) and a processor (58, 64) (driver) for coordinating the program schedule information with the television programming information (Lawler: col 10/lines 4-8,16-29, col 6/lines 15-28).

Regarding claim 23, a satellite-broadcast data link stream for receiving as discussed on claim 19, and further including a land-based modem by one of the satellite and land-based modem (Lawler: col 5/lines 34-37).

Regarding claim 25, comprises the method for commanding the set-top box apparatus claimed on claims 16, discussed above and/or 34 discussed below, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claims 26, 28, and 30-32 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 17, 19, and 21-23, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claim 34, substantially the same as claim 16 discussed above, and further where the command associated with the selected indicia causes a portion of the multimedia data stream to be stored, to be displayed at a future point in time (Lawler: in response to the selection of displayable indicia associated a command (action), col 10/lines 42-59, storing said command and executing instructions associated with said command at a future point in time, e.g. set record command via displayable indicia (record button 130), select displayable indicia associated with an action, col 10/lines 53-58, causing portion of the multimedia stream e.g. selected program to be recorded in a future point in time).

Regarding claim 35, where the time for future display is controlled by the command associated with displayable indicia (Lawler: in response to the selection of displayable indicia associated a command (action) (col 10/lines 42-59), select displayable indicia associated with an action, set reminder command via the selection of displayable indicia (reminder button 140) associated with respective command, col 10/line 65-col 11/line 32, col 11/line 45-col 12/line 12).

Regarding claim 36, substantially the same features as those discussed on claims 16, 25, and 34, wherein further multimedia stream includes video, which was discussed above.

Regarding claim 37, time for future display is predetermined (i.e. controlled) by the command associated with displayable indicia (Lawler: col 10/lines 60-64).

5. Claims 18, 20, 24 and 27, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et. al. (Lawler) in further view of Eyer U.S. Patent No. 5,982,445.

Regarding claims 18, 20 and 24, said multimedia includes received by satellite data link (Lawler: col 3/lines 54-57), however does not explicitly teach where said multimedia received by satellite data link comprises web pages in a markup language.

Eyer teach receiving by a television receiver display data (col 5/lines 13-26), said display data coded according to a markup language (e.g. HTML), display data also including future program scheduling information (col 4/lines 33-57) by a satellite data link receiver by a television receiver (col 8/lines 39-52);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to provide a scheme for adapting existing transmission and receiving equipment including set-top decoders and communication protocols such as those for transmission of digital television signals via satellite and/or cable plants for the display of web pages in view of its rapidly increasing use, as suggested by Eyer.

Regarding claims 27, 29, and 33 comprising the method associated with the set top box apparatus are substantially the same features as discussed on claims 18, 20, and 24, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

5. Additionally, claims 16-17, 19, 21-23, 25-26, 28, 30-32, 34-35, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620.

Regarding claim 16, Harper teaches a set-top box (600 of Fig. 3), (col 6/lines 40-41, col 3/lines 66-col 4/line 5), comprising;

receiver attuned to a broadband bandwidth channel for receiving digital/analog data, e.g. conventional television broadcast signals (i.e. a broadband receiver) (col 3/lines 44-col 4/line 5); receiving by said receiver, multimedia information (col 4/lines 13-16, live broadcast, processed and providing interactivity, col 6/lines 16-47, interactivity including display of graphic data included in received multimedia stream, col 5/lines 41-46, transmission/reception col 7/lines 19-46), multimedia information (video, audio and

graphics from a head end, col 6/lines 16-25) including displayable data stream (col 6/lines 31-35) and at least one command associated with a displayable indicia (col 7/lines 19-22, commands, col 19/lines 15-21, commands associated with displayable indicia, col 8/lines 1-14, 34-42, col 9/lines 14-19, displayable data stream received in received multimedia information, col 8/lines 63-col 9/line 5);

tuner/demultiplexer circuitry (616 of Figs. 3 and 7, col 5/lines 6-11) for separating in the displayable indicia (col 12/lines 17-34), the displayable data stream from the multimedia information (col 5/lines 67-col 6/line 9) and to form a display from the displayable data stream (col 12/lines 17-34, col 18/lines 39-42), the display including the displayable indicia (col 17/lines 51-59);

user-operable apparatus (604 of Fig. 1, col 6/lines 41-42) to select the displayable indicia (col 6/lines 49-col 7/line 6);

in response to selecting the displayable indicia, the command associated with the selected indicia is stored and executed in a later (future) point in time (col 12/lines 17-34, col 18/line 59-col 19/line 6, in response to a selection of displayable indicia, store and execution col 7/lines 34-46, 58-67, executable commands associated with displayable indicia, col 8/lines 1-14, 50-62); however Harper does not explicitly teach where multimedia information including a displayable data stream which further includes future programming is received and separated in real time;

Coleman teaches receiving in real time multimedia information including displayable data stream including future programming (video and graphic blended in received stream, col 2/line 45-55), multimedia information including "demand data stream" further including future programming (i.e. schedule guide) received in real time, (col 4/lines 60-col 5/line 3), received (32), demultiplexed (34) and displayed (54) (col 13/lines 37-48, 62-col 14/line 4, 19-22, rendered in real time, col 7/lines 2-14) program guide is acquired and displayed in real time, (col 6/lines 39-59 and col 7/lines 2-14 retrieved and displayed immediately); multimedia information including displayable indicia associated with commands (col 3/lines 36-42, col 15/lines 32-42).

It would have been obvious to one ordinary skilled in the art at the time the



invention was made to include multimedia information received in real time including displayable data stream further including future programming, motivation would be to further enhance Harper's composite interactive programming including future graphics message selection and associated commands broadcast as data codes embedded in the conventional video signal may be created to be include in other broadcast programs, as suggested by Harper.

Regarding claim 17, commands include switching the display to a channel associated with the future programming (Coleman: dedicated channel for current programming prior art, col 1/lines 56-65, guide enable user's to switch to a channel associated with the displayed guide, col 2/lines 62-col 3/line 2, program guide including future programming guide, col 4/lines 60-col 5/line 3, enable user's to switch to a channel associated with the displayed guide, col 3/lines 36-42).

Regarding claim 19, said receiver comprises a satellite data link to download a satellite-broadcasted data stream (Harper: col 3/lines 66-col 4/line 5, satellite connection col 11/lines 3-11) to receive multimedia information (Harper: col 6/lines 16-47).

Regarding claim 21, multimedia information including television programming (Harper: simulcast both including conventional television programming: col 2/lines 28-39, Coleman: 1/lines 17-30 an including future program schedule information associated with television programming), where schedule program information include commands associated with displayable indicia (Coleman: multimedia information including displayable indicia associated with commands [col 3/lines 36-42, col 15/lines 32-42).

Regarding claim 22, command is stored (Harper: col 26/lines 47-49) and a processor (36, 48 of Fig. 2) (driver) for coordinating the memory (50 of Fig. 2) (cache) and the future program schedule information (Coleman: col 13/lines 62-col 14/line 22 regarding mentioned Fig. 2).

Regarding claim 23, satellite data link (Harper: col 6/lines 16-25, satellite data link (150), col 3/lines 66-col 4/line 5, modem (312), col 10/lines 1-15).

Regarding claim 25, comprises the method for commanding the set-top box apparatus claimed on claims 16 and/or 34 rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claims 26, 28, and 30-32 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 17, 19, and 21-23, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claim 34, substantially the same as claim 16 discussed above, and further where the command associated with the selected (Harper: command associated with a displayable indicia col 7/lines 19-22, commands, col 19/lines 15-21, commands associated with displayable indicia, col 8/lines 1-14, 34-42, col 9/lines 14-19, displayable data stream received in received multimedia information, col 8/lines 63-col 9/line 5), indicia causes a portion of the multimedia data stream to be stored to be playback (displayed) at a future point in time (Coleman, col 3/lines 36-42, col 2/lines 62-col 3/line 2, icon (280) timer of Fig. 6, col 20/lines 49-52, selected program to be displayed automatically at preset time, col 19/lines 31-34, 53-56 downloaded icons).

Regarding claim 35, future display is also controlled by the command associated with the displayable indicia (Coleman, col 3/lines 36-42, col 2/lines 62-col 3/line 2, icon (280) timer of Fig. 6, col 20/lines 49-52, selected program to be displayed automatically at preset time, col 19/lines 31-34, 53-56 downloaded icons).

Regarding claim 36, substantially the same as discussed on claims 16, 25, and 34, wherein further multimedia stream includes video, which was discussed above and

further claim 36 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 16, 25 and 34 rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claim 37, comprising the method associated with the set top box apparatus are substantially the same features as discussed on claim 35, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

5. Claims 18, 20, 24 and 27, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620 in further view of Eyer U.S. Patent No. 5,982,445.

Regarding claims 18, 20 and 24, said multimedia includes received by satellite data link, as discussed above, however the above-mentioned prior art does not explicitly teach where said multimedia received by satellite data link comprises web pages in a markup language.

Eyer teach receiving by a television receiver display data (col 5/lines 13-26), said display data coded according to a markup language (e.g. HTML), display data also including future program scheduling information (col 4/lines 33-57) by a satellite data link receiver by a television receiver (col 8/lines 39-52);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to provide a scheme for adapting existing transmission and receiving equipment including set-top decoders and communication protocols such as those for transmission of digital television signals via satellite and/or cable plants for the display of web pages in view of its rapidly increasing use, as suggested by Eyer.

Regarding claims 27, 29, and 33 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 18, 20, and 24,

respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

7. This application filed under former 37 CFR 1.60 lacks the necessary reference to the prior application. A statement should read application number, filing data and current status (e.g. "This is a divisional of Application No. 08/825,209, filed 03/27/97 now patent No. 6,205,485") of all non-provisional parent applications referenced should be included.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark H. Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for Official communications intended for entry)

Or:

(703) 746-7240 (for Non-Official or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".



B. Prieto  
Patent Examiner  
July 5, 2002



MARK H. RINEHART  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100